

## REMARKS

### *Preliminary Remarks:*

Upon entry of this Amendment, claims 1 to 22 will be pending of which claim 1 is independent. Claim 1 is amended and claims 22 and 23 are new. Support for the claim amendments and the new claims may be found in the specification as filed. *See, for example*, page 5, second paragraph. Therefore, no new matter is added.

### *Claim Rejections:*

#### Rejections under 35 U.S.C. § 103

The burden is on the examiner to make a *prima facie* case of obviousness, which requires an objective analysis as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *KSR International v. Teleflex Inc.*, 550 U.S. 398, 82 U.S.P.Q.2d 1385 (2007), the U.S. Supreme Court affirmed that this analysis includes the following factual inquiries:

- (1) determining the scope and content of the prior art;
- (2) ascertaining the differences between the claimed invention and the prior art; and
- (3) resolving the level of ordinary skill in the pertinent art.

Further, the *Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 In View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.* (USPTO Guidelines) state that, having undertaken the factual inquiries of *Graham*, a rejection under 35 U.S.C. § 103 may be supported by one or more of the following rationales:

- (1) combining prior art elements according to known methods to yield predictable results;
- (2) simple substitution of one known element for another to obtain predictable results;
- (3) use of a known technique to improve similar methods in the same way;
- (4) applying a known technique to a known method ready for improvement to yield predictable results;
- (5) choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (6) variations that would have been predictable to one of ordinary skill in the art; and

(7) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine the prior art reference teachings to arrive at the claimed invention.

72 Fed. Reg. 57526, 57529 (October 10, 2007).

Each of the above-noted rationales requires predictability in the art and/or a reasonable expectation of success, and the Examiner must consider objective evidence that rebuts such predictability and reasonable expectation of success. The objective evidence or secondary considerations may include unexpected results and/or failure of others (*e.g.*, evidence teaching away from the currently claimed invention), evidence of commercial success, and long-felt but unsolved needs, as found in the specification as-filed or other source. *Id.* When considering the obviousness of a combination of known elements, the operative question is "whether the improvement is more than the predictable use of prior art elements according to their established functions." *KSR*, 550 U.S. at \_\_\_, 82 U.S.P.Q.2d at 1396.

Claims 1 to 9 and 13 to 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Krallmann *et al.* (CA 2,292,983) in view of Smith (EP 0 190 630). Applicants respectfully traverse.

As amended, claims 1 to 9 and 13 to 20 are directed to casing that comprise, *inter alia*, an antimicrobial constituent that is combined with a viscosity increasing component or an oil emulsion. Krallmann *et al.* disclose a plastic tubular sausage casing which is pre-moistened and thereby conditioned in ready-to-fill form. The casing is made up of at least three layers, including polyamide layers on the inside and on the outside and a water-barrier layer between the polyamide layers. Casings made of plastic materials generally can absorb only small amounts of water, if at all.

Smith discloses fiber-reinforced cellulose sausage casings which absorb at least 40% by weight of water, based on the dry weight of the casings, and thus are in a ready-to-fill form. The casings can absorb up to 240% by weight of water. When such casings are stored, the growth of molds, yeasts and other microorganisms is frequently observed. To prevent the growth of microorganisms during storage of the casing, Smith discloses adding an antimycotic agent (C<sub>1</sub> - C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acid.

Applicants respectfully submit a person of ordinary skill in the art would not combine the teaching of Krallmann *et al.* with that of Smith because the properties of casings made from polyamides are not comparable with the properties of casings made from cellulose. In particular, one of ordinary skill in the art would not have been motivated to use (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acid as an antimicrobial agent for plastic casings because these esters work as antimicrobial agents only when absorbed by the casing.

In other words, one of ordinary skill in the art would recognize that (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acids are good antimicrobial agents for casing that absorb a lot of water, *e.g.*, cellulose casings, because these esters will be absorbed into the casing along with the water. On the other hand, one of ordinary skill in the art would also recognize that this feature of (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acids would not be effective for casings that do not absorb a lot of water, *e.g.*, polyamide casings. Therefore, one of ordinary skill in the art would not combine two teachings that are incompatible with each other.

Certainly neither Krallmann *et al.* nor Smith teach combining the alkyl *para*-hydroxybenzoate and/or a salt thereof with a viscosity increasing component or an oil emulsion. Krallmann *et al.* do not use alkyl *para*-hydroxybenzoate and/or a salt thereof and Smith has no need for a viscosity increasing component or an oil emulsion because the casings of Smith absorb plenty of water along with a sufficient amounts of (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acids.

Finally, even if, *arguendo*, one of ordinary skill in the art used the (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acids of Smith to generate an antimicrobial polyamide casing according to Krallmann *et al.*, such a combination would not result in the casing as claimed – because the polyamide casing of Krallmann *et al.* would not absorb a sufficient amount of (C<sub>1</sub> – C<sub>7</sub>)alkyl esters of *para*-hydroxy-benzoic acids to become an antimicrobial casing.

In conclusion, Applicants respectfully submit that claims 1 to 9 and 13 to 20 are not unpatentable over Krallmann *et al.* in view of Smith and respectfully request withdrawal of this rejection.

Claims 10, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Krallmann *et al.* in view of Smith in further view of Quinones *et al.* (U.S. Pat. No. 6,183,826). Applicants respectfully traverse.

Applicants have discussed Krallmann *et al.* and Smith, *supra*. The Examiner has cited Quinones *et al.* for teaching that it is common in the art to coat a food casing using a spray (or shirr solution) containing an antimicrobial agent during the shirring process. The Examiner admits that Krallmann *et al.* and Smith are silent regarding spraying the solution containing the antimicrobial agent onto the foodstuff casing. Office Action at page 4. However, Quinones *et al.* teach the casing, not the shirring solution, may contain an antimycotic agent. Quinones *et al.* disclose fibrous cellulose casings which commonly contain additives such as plasticizers and antimycotics (column 7, lines 64 to 65) and a shirring solution that may contain an anti-pleat lock agent, a lubricant, a surfactant, water and/or a humectant (column 8, lines 3 to 5). Thus, Quinones *et al.* does not cure the deficiencies of Krallmann *et al.* and Smith.

Applicants respectfully submit that the combination of Krallmann *et al.*, Smith and Quinones *et al.* does not disclose all the elements of claims 10, 11 and 12. Therefore, Applicants respectfully request withdrawal of this rejection.

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Inventor(s): Hammer *et al.*  
Attorney Docket No.: 2901886-000022

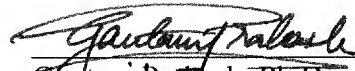
### CONCLUSION

In view of the amendments and remarks above, Applicants respectfully submit that this application is in condition for allowance and request favorable action thereon. The Examiner is invited to contact the undersigned if any additional information is required.

As this response is filed within the statutory period for reply, Applicants believe that no fee, other than the appropriate extension of time and new dependent claims, is due. If additional fees are required, they may be charged to Deposit Account No. 50-4254, referencing Attorney Docket No. 2901886-000022.

Respectfully submitted,

BAKER, DONELSON, BEARMAN, CALDWELL  
& BERKOWITZ, P.C.

  
Gautam Prakash, Ph.D.

Registration No.: 53,481

Direct Telephone No.: 202-508-3423

Susan E. Shaw McBee  
Registration No. 39,294

Customer No.: **84331**

555 Eleventh Street, N.W.  
Sixth Floor  
Washington, DC 20004

Telephone: 202-508-3400  
Facsimile: 202-508-3402

GP/JRB